

REMARKSI. Introduction

In response to the Office Action dated October 28, 2003, please consider the following remarks. Claims 1-18 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

II. Allowable Subject Matter

In paragraph 7, the Office Action indicates that the subject matter of claim 7 would be allowable if written in independent form including all of the limitations of the base claim and any intervening claims. The Applicants acknowledge the Office Action's indication of allowable subject matter, but traverse the rejection of claims 1-6 and 8-18. Should the rejection of these claims be maintained, the Applicants will make suitable amendments to present the allowable claims in independent form.

III. The Cited References and the Subject Invention

A. The Wugofski Reference

U.S. Patent No. 6,003,041, issued December 14, 1999 to Wugofski discloses a method and managing multiple channel maps from multiple input devices in a multimedia system. A computer system has a large number of media input sources selectively coupled to a single presentation device. A device database tracks characteristics and connections of the input sources. Multiple, possibly conflicting, channels are assigned to a set of mutually distinct logical channel designations in a channel-map database. Program events occurring on the channels reside in a guide database.

IV. Office Action Prior Art Rejections

In paragraph (1), the Office Action rejected claims 1-6 and 8-18 under 35 U.S.C. § 102(e) as unpatentable over Wugofski, U.S. Patent No. 6,003,041 (Wugofski). The Applicants respectfully traverse this rejection.

With Respect to Claims 1 and 8: Claim 1 recites:

In a broadcasting system having a plurality of service networks, each broadcasting a set of programs and program guide information describing at least a portion of the set of programs, a method for presenting a program guide to a subscriber, comprising the steps of:
determining a receiver station configuration;
receiving a first program guide information at the receiver station, the first program guide information comprising a default transmitting network identifier value uniquely identifying the service network transmitting the first program guide information; and
generating a first program guide from the first program guide information and presenting the first program guide, according to a comparison between the determined receiving station configuration and the default transmitting network identifier.

According to the Office Action, the foregoing features are disclosed in Wugofski, because "determining a receiver station configuration" reads on Wugofski's "determining, adding, and deleting input source connections" as follows

If a device is disconnected from a source or from a multiplexer input, step 711 causes step 712 to access the device database 350. Step 713 receives an identification of the particular connection that has been broken. Step 714 deletes the record specifying that connection, and passes control to exit the service. When a new connection is made, step 711 executes step 715, which requests the user to identify the device 120, its port number in multiplexer 130, and its source 110. Step 716 may then read a number of characteristics from the device itself, such as whether it is capable of tuning multiple channels. Step 717 then builds a new record containing the information in columns 520, FIG. 5. Step 718 adds the record to device database 350, and passes control to exit 702. (col. 6, lines 19-33)

and presumably, the step of "receiving a first program guide information at the receiver station, the first program guide information comprising a default transmitting network identifier value uniquely identifying the service network transmitting the first program guide information" reads on Wugofski's "uniquely identified" "input source connections" as follows:

A set 410 of records have columns 420 for storing information including a unique event identifier 421, a title 422, a designation 423 of the source providing the event, the physical channel 424 within source 423, and a start time and date for the event; other information may be kept in database 340 as well. In FIG. 4, records 411-413 show a single TV show available from three different sources at two different times. Record 411 indicates that the show is broadcast on a channel that DBS service 123 identifies as '156'. The program starts at 7 pm on September 17. Record 412 specifies a broadcast of this show on VHF TV channel '4' an hour later. Record 413 logs the show at the same time on a local cable service. The cable channel designation, '156' is—strictly coincidentally—the same as that for the DBS broadcast in record 411. (col. 4, line 66 through col. 5, line 14)

and because the "input source connections" are displayed according to configuration and sources as follows:

	621 LOGICAL CHANNEL	622 PHYSICAL CHANNEL	623 SOURCE	624 PRIMARY DEVICE	625 SECONDARY LOG. CHNL	626 NAME	
611	01	156	DISH	INTERNAL DBS	(NONE)	FOX	370
612	02	157	DISH	INTERNAL DBS	(NONE)	NBCWEST	
613	03	4	ANTENNA	RF TUNER	01	FOX	
614	04	156	CABLE	VCR2	(NONE)	FOX	

FIG. 6

The Applicants respectfully traverse this rejection. Claim 1 recites the step of "receiving a first program guide information ... comprising a default transmitting network identifier value uniquely identifying the service network transmitting the first program guide information". The Wugofski reference discusses the notion of electronic program guides or EPG (see, for example, the text beginning at col. 4, line 34), but does not disclose receiving an EPG with a default network identifier value uniquely identifying the service network transmitting the EPG. Indeed, since the Office Action appears to analogize the "service network" described above to the "input source connections" of Wugofski, it is important to note that information identifying the "input source connections" are not transmitted in anything like a program guide, but rather entered by the user via a user interface. This is described in the "device ID" aspect of block 715 of FIG. 7A and the text recited below:

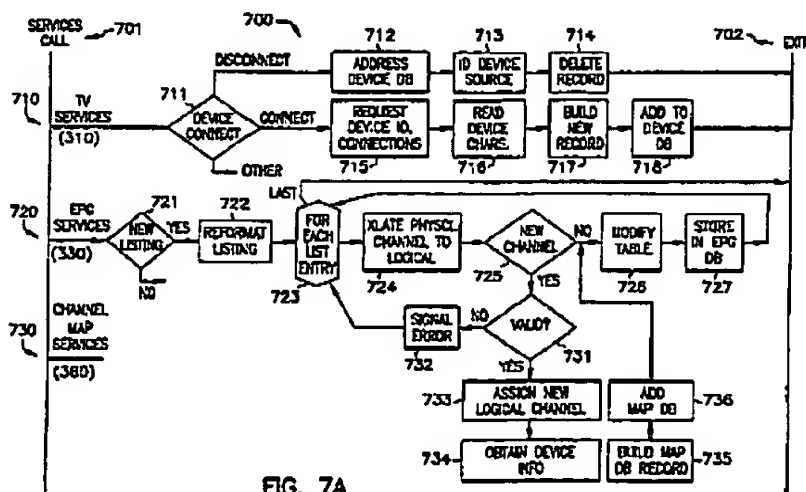


FIG. 7A

FIG. 7 describes the operation 700 of the invention within the architecture 300, FIG. 3.

When the connection of an input device 120 to a signal source 110 or to multiplexer 130 changes, a user employs a user interface 320 to call TV-services module 310, at 710 in FIG. 7. If a device is disconnected from a source or from a multiplexer input, step 711 causes step 712 to access the device database 350. Step 713 receives an identification of the particular connection that has been broken. Step 714 deletes the record specifying that connection, and passes control to exit the service. When a new connection is made, step 711 executes step 715, which requests the user to identify the device 120, its port number in multiplexer 130, and its source 110. Step 716 may then read a number of characteristics from the device itself, such as whether it is capable of tuning multiple channels. Step 717 then builds a new record containing the information in columns 520, FIG. 5. Step 718 adds the record to device database 350, and passes control to exit 702. (col. 6, lines 14-33)

Claim 8 likewise recites a program guide having a default transmitting network identifier, and is therefore patentable as well.

For the foregoing reasons, the Applicants respectfully traverse the rejection of claims 1 and 8.

With Respect to Claims 2 and 9: Claim 2 recites:

The method of Claim 1, wherein the step of determining the receiving station configuration comprises the steps of:

*presenting a plurality of configurations to the subscriber;
accepting a selection of configurations from among the plurality of presented configurations; and
determining the receiving station configuration according to the selected configuration.*

According to the Office Action, these features are disclosed as follows:

User-interface layer 230 provides a number of modules allowing a user to interact with components in both services layer 220 and driver level 210. For example, an interface could provide facilities for a user to enter or update specific items in a parental controls service. "View" interfaces generally comprise full-screen interfaces covering multiple related functions, such as a TV View for programing and controlling media receivers 120, and a PC View providing a desktop for executing application programs 202 from processing system 150. "Overlays" are mostly not independent interfaces; rather, they cooperate with and extend view interfaces. Overlays primarily provide contextual information and means for navigating a hardware facility. (col. 4, lines 21-33)

In rejecting claim 1, the Office Action indicates that the "claimed determination of a configuration is met by the references disclosure of determining, adding, and deleting input source connections." The rejection of claim 2 would therefore require that the reference disclose the steps of presenting a plurality of input source connections to a subscriber, accepting input source connections from among the plurality of presented configurations, and determining the input source

connections from the selected input source connections. Plainly, it does not do so. Accordingly, the Applicants respectfully traverse the rejection of claim 2.

Claim 9 recites an input output module for accepting a selection of receiver configurations among a plurality of presented configurations, having a first module for presenting the plurality of configurations to the subscriber, and a second module for determining the receiver station configuration according to the selected configuration. According to the Office action, the first module is disclosed as follows:

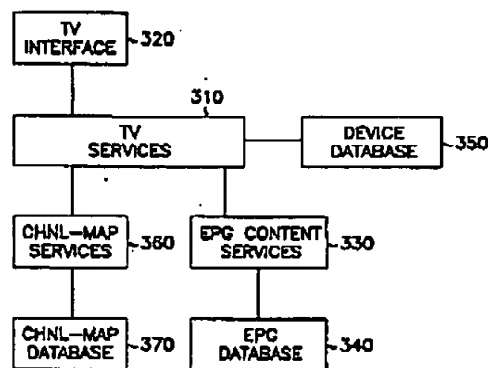


FIG. 3

and

When the connection of an input device 120 to a signal source 110 or to multiplexer 130 changes, a user employs a user interface 320 to call TV-services module 310, at 710 in FIG. 7. If a device is disconnected from a source or from a multiplexer input, step 711 causes step 712 to access the device database 350. Step 713 receives an identification of the particular connection that has been broken. Step 714 deletes the record specifying that connection, and passes control to exit the service. When a new connection is made, step 711 executes step 715, which requests the user to identify the device 120, its port number in multiplexer 130, and its source 110. Step 716 may then read a number of characteristics from the device itself, such as whether it is capable of tuning multiple channels. Step 717 then builds a new record containing the information in columns 520, FIG. 5. Step 718 adds the record to device database 350, and passes control to exit 702. (col. 6, lines 16-33)

However, the foregoing merely discloses a system where after the user changes input device connections, the user uses the TV-Services module 310 to change the device database 350. At no point are a plurality of receiver station configurations presented (at best, only arguably the current

configuration is presented), nor does the user select from a plurality of presented configurations. Accordingly, the Applicants respectfully traverse the rejection of claim 9.

With Respect to Claims 3 and 10: Claim 3 recites:

*The method of Claim 1, wherein receiving station comprises at least one converter communicatively coupled to a receiver and the step of determining a receiving station configuration comprises the steps of:
determining a number of converters; and
determining the receiving station configuration according to the number of converters.*

According to the Office Action, these features read on the reference's "disclosure of storing information about media input devices connected to the system and determining subsequent channel mapping and program contents accordingly." The Office Action references the following portion of the reference:

Module 310 stores information about media input devices connected to system 100 in a device database 350. FIG. 5 describes a structure 500 for this database. A set 510 of records includes columns 520 for storing certain characteristics of each device. Column 521 holds a device name by which the system knows each connected receiver 120. Column 522 specifies the input 522 to which that device is coupled. Column 523 contains a flag indicating whether or not the device is tunable, i.e., has multiple channels. Column 524 includes an identifier naming the source 110 of its signals. For example, record 511 asserts that RF tuner 121 feeds input V1 of multiplexer 130 in FIG. 1, that it is tunable to different channels, and that RF antenna 111 sources its signals. A single receiver device may possess more than one record; records 513 and 514 both name DBS modem 123, but indicate that, like most satellite receivers, it can be connected to a local-channel source 111 as well as to its own dish 112. The structure 500 of database 350 permits multiple sources, allows any combination of tunability, and admits more than one input connection for any device. Other information may be recorded if desired. The database structure may comprise a simple table or a more complex entity.

Channel-mapping services module 360 builds, maintains, and reads a channel-map database 370 for module 310. FIG. 6 shows a structure 600 for database 370. A set 610 of individual records 611-614 includes columns for designating independent logical and physical designations 621 and 622 for the same channel, for specifying a signal source 623 for that channel, and for naming a primary device 624 for receiving the channel into multiplexer 130, FIG. 1. Logical channel numbers—or other designations—621 are unique within system 100, and have no necessary relation to physical channels, transmission channels, or any other designation employed by their source. They create a linear name space across the entire system. The user, however, never need be aware of channel 621; interface 320 preferably displays only the physical channel designation 622 to the user. Module 320, of course, must use the physical channel number 622 for tuning a selected device. (Satellite receivers commonly convert their physical channel numbers internally to another set of transmission channels.) Column 623 designates a source 110 for the logical channel. Column 624 names one of the receiver devices 120 as the primary device for receiving the logical channel, the one that is normally preferred by the user. Column 625 names one or more secondary source for the same signal. (col. 5, lines 15-60)

The Applicants are unclear as to how "storing information about media input devices connected to the system and determining subsequent channel mapping" can be analogized to the steps of "determining a number of converters" and "determining the receiving station configuration

according to the number of converters.” In any case, the foregoing text does not disclose converters at all, nor the other features of claim 3. Accordingly, the Applicants traverse this rejection as well.

Claim 10 is patentable for the same reasons.

With Respect to Claims 4 and 11: Claim 4 recites:

The method of Claim 1, wherein the step of determining a receiving station configuration comprises the steps of:
receiving a message from the broadcasting system indicating the receiving station configuration.

According to the Office Action, the reference discloses “the use of broadcast information, for determining the system/guide configuration” as follows:

EPG module 330 provides a function for recording and organizing programs or other events available from media devices 120. Although the internal operation of module 330 is not relevant here, an understanding of its overall functions is helpful. Some media sources provide in-band guides for their programming. For example, DBS modem 112 continually receives signals representing broadcast information as to what events will occur on particular tunable satellite channels at specific times. Other companies—some of which themselves provide media and some of which do not—furnish out-of-band program guides in electronic form. For example, a user may subscribe to electronic program listings transmitted periodically over the Internet and received into system 100 via network interface 155, which may be a modem or similar device. EPG module 330 integrates and stores electronic program guides into a database 340. FIG. 4 illustrates a structure 400 for storing this information. (col. 4, lines 50-67)

The Applicants respectfully disagree. The Office Action rejected claim 1 by arguing that the input source connections were analogous to the receiving station configuration. Even if this analogy were accurate, a rejection of claim 4 would therefore require that the input source connections are received in a broadcast message from the broadcasting system. Clearly this is not the case. Nothing in the foregoing discloses the features of claim 4, and the Applicants therefore traverse this rejection as well.

Claim 11 is patentable for the same reasons

With Respect to Claim 5: Claim 5 recites that the program guide is presented to the subscriber only if the receiving station configuration indicates that the receiving station is configured to receive signals from the first service network. According to the Office Action, this is disclosed as follows:

If step 725 detects a device/physical-channel key that is not present in database 370, it calls channel-map services module 360, at 730 in FIG. 7. Step 731 first asks whether the device is valid: that is, whether the device name is present in the set of connected receivers 120, and, if so, whether the listing channel can be tuned by that device. If the list channel is invalid, step 732 signals an error and returns to step 723. (col. 6, lines 50-56)

The Office Action indicates that the foregoing discloses "signaling an error if the channel cannot be tuned by the device", and reasons, that this (presumably inherently) would prevent the display of the program guide information".

The foregoing discloses what happens if the user attempts to tune a non-existent physical channel. If the related device is not one of the connected receivers, or if the related device is connected, but cannot tune the channel, an error is signaled. Claim 5, however, recites comparing a system configuration with a default transmitting identifier (which is transmitted with the program guide), and presents the *program guide*, not just the channel, only if the receiving station is configured to receive signals from the related service network. In contrast, the operations described in the reference are performed for each list entry (see block 723 of FIG. 7), not for the entire program guide. The Wugofski reference, in fact, does not disclose anything analogous to a default transmitting identifier.

With Respect to Claim 6: Claim 6 introduces the notion of a *transmitting network identifier* (as opposed to the *default transmitting network identifier* described thus far. *Transmitting network identifiers* are associated with *viewer channels* instead of *service networks*. Claim 6 recites:

The method of Claim 1, wherein each of the programs in the first set of programs is associated with a viewer channel, and the first program guide information further comprises a transmitting network identifier associated with the viewer channel, the transmitting network identifier value identifying a service network from among the plurality of service networks transmitting the program associated with the viewer channel, and the step of presenting the first program guide according to a comparison between the determined receiving station configuration and the default transmitting network identifier comprises the steps of:

- (a) comparing the determined receiving station configuration and the default transmitting network identifier;*
- (b) comparing the determined receiver configuration and the transmitting network identifier;*
and
- (c) generating the a first program guide from the first program guide information and presenting the first program guide, according to the comparison between the determined receiving station configuration and the default transmitting network identifier, and the comparison between the determined receiving station and the transmitting network identifier.*

According to the Office Action, these features are met by the disclosure of "a designations of primary and secondary receivers of a logical channel and the subsequent generation and presentation of the program guide/information to the user" thusly:

(Satellite receivers commonly convert their physical channel numbers internally to another set of transmission channels.) Column 623 designates a source 110 for the logical channel. Column 624 names one of the receiver devices 120 as the primary device for receiving the logical channel, the one that is normally preferred by the user. Column 625 names one or more secondary source for the same signal. For example, the RF tuner primary device in record 613 could be unavailable for some reason; column 625 specifies that the signal from physical channel '4' of the RF tuner is also obtainable on logical channel '01'--that is, on physical channel '156' of the satellite dish. A comparison of records 611 and 614 demonstrates that two channels having the same physical designation, '156', have different logical designations, '01' and '04'. Database structure 600 may also include a name for presentation to the user, in column 626. Thus, for example, the name "Fox" can be displayed for any of the logical channels in records 611, 612, and 614, which all represent a Fox.RTM. network station. The entries in column 626 have no fixed significance; they may represent a source name from a program guide, an arbitrary designation entered by the user, or any other information. Database 370 may include additional columns containing further information concerning each logical channel. (col. 5, line 53 through col. 6, line 10)

The Applicants frankly do not understand how the foregoing discloses the features of claim 6, nor how the features of claim 6 can be analogized to the designation of "primary and secondary receivers" as the Office Action indicates. Accordingly, the Applicants traverse this rejection as well.

With Respect to Claims 12-18: Claims 12-18 are patentable for the same reasons as presented above for claims 1-7.

V. Dependent Claims

Dependent claims 2-7, 9-11, and 13-18 incorporate the limitations of their related independent claims, and are therefore patentable on this basis. In addition, as described above, these claims recite novel elements even more remote from the cited references. Accordingly, the Applicants respectfully request that these claims be allowed as well.

VI. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicants' undersigned attorney.

Respectfully submitted,

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